## Cathy DiSomma's Handout from her Talk February 6, 2017

What if there was a preventative measure that could slash your risk of developing Alzheimer's disease by up to half?

Some nutritionists may have found it, in the form of a Mediterranean-based diet that's high in nutrients and low in sugar and unhealthy fats.

The brain-healthy (and fittingly named) MIND diet — which stands for "Mediterranean-DASH Intervention for Neurodegenerative Delay" — is effective even if it is not followed rigorously, according to a new study from Rush University. Researchers found that people who followed the diet closely had a 53 percent lower chance of developing Alzheimer's, and those who only moderately adhered to the diet still lowered their risk of developing the devastating brain disease by 35 percent.

The MIND Diet incorporates elements of the Mediterranean diet — which is high in fish, healthy fats, vegetables and whole grains and has been found to reduce the risk of heart disease and cancer — and the DASH (Dietary Approaches to Stop Hypertension) diet — which is heavy in fruits, vegetables and low-fat dairy and has been found to reduce the risk of hypertension, heart attack and stroke.

The researchers said in a <u>press release</u> that the MIND diet is easier to follow than the full Mediterranean diet, which requires daily fish consumption and multiple servings of fruits and vegetables.

## Here's a look at a typical day on the MIND diet:

- 3 servings of whole grains
- A salad plus one other vegetable
- A glass of wine
- Nuts as a snack
- Blueberries or strawberries
- Chicken or fish
- Beans (every other day)

In addition to eating these healthy foods, the MIND protocol requires avoiding foods like butter and cheese, red meat, pastries, sweets and fried or processed foods.

Overall, the diet "emphasizes natural plant-based foods and limited intakes of animal and high saturated fat foods but uniquely specifies the consumption of berries and green leafy vegetables," the study says.

In order to assess the protective effects of the diet, the researchers looked at nutritional intake data from over 900 older Americans who were already participating in the ongoing Rush Memory and Aging Project (MAP), which studies common conditions of aging and began in 1997. Rather than asking study volunteers to follow the MIND diet, they analyzed data spanning a decade from participants who were already eating in a way that followed the basic MIND diet principles, as well as those who were eating in line with the Mediterranean diet and the DASH diet.

Over a five-year period, the team collected data on incidences of Alzheimer's. The study controlled for a number of other factors known to influence the development of Alzheimer's, including education, physical activity, smoking and cardiovascular conditions.

The team found that the MIND diet lowered Alzheimer's risk by 53 percent, while the Mediterranean diet lowered it by 54 percent and the DASH diet lowered it by 39 percent. However, even when the MIND diet was only moderately followed, it still reduced the risk of Alzheimer's by 35 percent, while moderate adherence to the other two diets seemed to have only negligible protective benefits.

"It was surprising that even those individuals who had moderate adherence to the MIND diet had reduced risk of Alzheimer's disease," Dr. Martha Morris, the study's lead author, told The Huffington Post in an email. "This was not the case for either the DASH or Mediterranean diets for which only the highest adherence conferred protective benefits." This is likely the case because the MIND diet was specifically designed to reflect the latest research on nutrition and the brain, Morris explained. If followed for many years, the diet holds even greater promise as an Alzheimer's prevention measure.

"People who eat this diet consistently over the years get the best protection," Morris said in a statement.

While a number of diverse factors — including genetics, environment and lifestyle — may contribute to the development of Alzheimer's, the research suggests that diet is certainly among these factors. As such, targeting nutrition may be an effective prevention measure.

The findings were published in the March 2017 issue of the *Journal of the Alzheimer's Association*.